

PESTICIDE HUMAN EXPOSURE COMPLAINT

(b) (6)

CASE #18SP071020

On July 10, 2018, at 8:44 am, South Dakota Agriculture Inspector Sherrie Petersen received an email from Joseph Farley, Enforcement Specialist with the South Dakota Department of Agriculture to investigate a Pesticide Human Exposure complaint reported by (b) (6) South Dakota.

Information received was that (b) (6) reported that she was exposed to pesticides by a commercial sprayer, when out walking her dog on July 9, 2018, on (b) (6) (b) (6)

On July 10, 2018, at 2:01 pm, Inspector Petersen and Mr. Farley met with (b) (6) and (b) (6), (b) (6) at their residence. After presenting my credentials and explaining why Inspector Petersen and Mr. Farley was there a Pesticide Notice of Inspection [attachment #1] was filled out and signed by (b) (6) then filled out and signed Voluntary Statements [attachment #2, 3] after collecting information from (b) (6) and (b) (6) about the pesticide exposure. Inspector Petersen then filled out an Inspection Findings Sheet [attachment #4]. Information that was received from (b) (6) (b) (6) was on the evening of July 9, 2018, at 5:35 pm, (b) (6) was walking east with her dog on (b) (6) (b) (6) then started back going west on (b) (6) (b) (6) when (b) (6) heard a commercial sprayer in the south side soybean field. (b) (6) then yelled to (b) (6), (b) (6) to get the video camera. (b) (6) stopped at the end of her drive way and started filming the commercial sprayer in the soybean field, located south-east of their driveway. The wind blew the vapor into (b) (6) face, while standing in her driveway. (b) (6) began feeling a burning in her throat, eyes, chest, and skin. (b) (6) had trouble breathing and started tingling and trembling. (b) (6) heart rate had increased. (b) (6) went back inside her house and continued to feel ill. (b) (6) also called The Poison Control Center. The Poison Control Center told her to either call 911 or get to a hospital immediately.

(b) (6), (b) (6) reported that on July 9, 2018, the incident happened at approximately 4:50pm-5:15 pm. (b) (6), (b) (6) arrived at home at 4:35 pm. (b) (6), (b) (6) was unloading his work truck when he heard a spray "buggy" pass the front of (b) (6), (b) (6) property. The wind was blowing into my property, so (b) (6), (b) (6) went to the end of the driveway on (b) (6) where (b) (6) was out walking the dogs and getting the mail. The commercial applicator entered the south-east soybean field owned by (b) (6), (b) (7)(C). (b) (6), (b) (6) pointed to the wind sock located on (b) (6) and (b) (6) property and the neighbor's flag, letting the commercial applicator know that he will be drifting into (b) (6) and (b) (6) yard if the sprayer gets too close. The warning from (b) (6), (b) (6) went unnoticed from the commercial applicator that began spraying the soybean field. (b) (6) immediately could smell herbicide. (b) (6), (b) (6) retrieved the video camera. The commercial applicator continued to spray even after (b) (6) began videotaping the commercial sprayer in the soybean field. (b) (6), (b) (6) witnessed the commercial sprayer

heading west on the north end of the soybean field where the sprayers boom was directly over the active water way in the south ditch, which flows south-east to northwest into the (b) (6) River. (b) (6), (b) (7)(C) noticed that (b) (6) was having reactions to the pesticide. (b) (6), (b) (7)(C) witnessed (b) (6) having breathing issues, burning skin, and a burning throat. (b) (6), (b) (7)(C) then transported (b) (6) to the Sanford Hospital Emergency Room, in Vermillion; SD. (b) (6), (b) (7)(C) experienced the same issues as (b) (6) but decided to have decontamination done at the Emergency Room as (b) (6), (b) (7)(C) only treatment. (b) (6) called the Clay County Sheriff's Office, in Vermillion to see if they could track down the chemicals that were applied to the soybean field. (b) (6) and the doctor's assistant, we were told that only fertilizer was being used. That changed later to Roundup, Ultra Blazer and Tap Out. On July 10, 2018, at 9:41 am, (b) (6) contacted Chad Nelson, Agronomy Manager, for Southeast Farmers Coop, 31303 471<sup>st</sup> Ave, Burbank, SD; Mr. Nelson emailed the spray record to (b) (6). The spray record did not match the chemicals stated earlier that were used or the local wind conditions. (b) (6), (b) (7)(C) reported that during the incident the wind was out of the south blowing north, north-west into (b) (6) and (b) (6) property. Inspector Petersen collected the spray record sent to (b) (6) from South East Coop. Inspector Petersen collected Ultra Blazer Information, Tap Out Information and Roundup Weathermax Information and a Sanford Emergency Room Nurse's note, provided by (b) (6), (b) (7)(C) [Attachments #14-17, 28].

Inspector Petersen and Mr. Farley then toured (b) (6) and (b) (6) yard. Inspector Petersen and Mr. Farley collected 5 samples #04-SP-19, #05-SP-19, #06-SP-18, #07-SP-19, #08-SP-19 in five different locations. Sample numbers #09-SP-19, #10-SP-19 and #11-SP-19 was (b) (6) and (b) (6) contaminated clothing.

On July 10, 2018, at 4:00 pm, Inspector Petersen and Mr. Farley arrived at South East Farmers Coop, 31303 474<sup>st</sup> Ave, Burbank, SD. After presenting my credentials a Pesticide Notice of Inspection was filled out and signed by Chad Nelson, Agronomy Manager for South East Farmers Coop [attachment #5]. A copy of the spray record and a Weather History from Gurney Municipal, SD was obtained from Mr. Nelson [attachment #6, 7] indicating that July 9, 2018, Brian Rupp, Commercial Applicator for South East Farmers Coop, applied Roundup Weathermax, Zaar, Acifin 2L, Tapout, Jusfified and Priaxor to (b) (7)(C), (b) (6) owner of the soybean field located (b) (6), (b) (7)(C). Inspector Petersen filled out 1 Pesticide Use Inspection Report [attachment #8]. On July 13, 2018, at 10:51 am, Inspector Petersen received an email from Mr. Nelson, of 2 Voluntary Statements from Mr. Rupp and Josh Adams, Agronomy Manager, for South East Farmers Coop, in Burbank, SD. Mr. Rupp stated that on July 9, 2018, at approximately 5:30 pm, Mr. Rupp entered the east end of the soybean field. Mr. Rupp indicated that on the west side of the soybean field, there was volunteer corn so Mr. Rupp had to have the spray booms higher to stay over the corn. Mr. Rupp checked the wind direction on wunderground.com, on his way to the soybean field. The weather app showed that the wind direction was ENE at 8-10 mph. Mr. Rupp entered the east end of the soybean field when he noticed a lady standing on the south side of the road, along the soybean field and a man standing on the north side of his driveway. Mr. Rupp witnessed the

women filming while he was spraying the soybean field. Mr. Rupp was not concerned since the weather app indicated the wind direction and speed was good to spray. Mr. Rupp texted Mr. Adams to let him know what was going on. Mr. Adams asked Mr. Rupp to take a picture or video of the wind speed. Mr. Rupp took a video of the wind speed on his last pass, on the north end of the soybean field. The wind speed was 4.1 mph hour out of the east [attachment #9]. Mr. Adams indicated on his Voluntary Statement that he was aware of the place north of the soybean field, and that it was an Organic farmer. Mr. Adams called Mr. Farley and asked about pesticide label restrictions. Mr. Farley stated to Mr. Adams that as long as the pesticide label restrictions were followed, they should not be a problem with application. Mr. Adams sent Mr. Rupp to the soybean field. Mr. Adams checked the wind speed on his wind meter; it was 2.1-5 mph hour out of the east. On July 10, 2018, Mr. Adams checked the wind speed on the web site weatherunderground.com with Inspector Petersen and Mr. Farley, indicating the wind speed was 7mph during the application times of 5:30-6:15 pm [attachment # 10].

On July 11, 2018, at 9:32 am, Inspector Petersen contacted Chief Deputy Paul Pederson [605-677-7100] Clay County Sheriff's Office, 15 Washington Street, Vermillion, SD, requesting the incident report that was filed for (b) (6). Chief Deputy Pederson agreed to send the report by email, with the requested report attached to Inspector Petersen. On July 12, 2018, at 10:20 am, Inspector Petersen received an email from Andy Howe, Clay County Sheriff. The report indicated that on July 9, 2018, at 5:25 pm, Kaleb Christopherson, Clay County Deputy, responded to a call from (b) (6). (b) (6) reported to Deputy Christopherson that chemical had been sprayed on the field next to (b) (6) home and that the over spray went into (b) (6), (b) (6) yard. (b) (7)(C), (b) (6) wanted Deputy Christopherson to contact the land owner to find out what chemical was being used as (b) (6), (b) (6) wife was experiencing adverse side effects from the chemical. Deputy Christopherson contacted (b) (6) the land owner who advised Deputy Christopherson that he did not know what chemicals were being used as South East Farmers Coop was conducting the spraying of his field. Deputy Christopherson contacted South East Farmers Coop and spoke with an employee who was unable to provide information. He also stated that everyone had gone home for the night. Deputy Christopherson called (b) (7)(C), (b) (6) back and told him that he had not been able to find out any information, but told him he would keep trying. Deputy Christopherson received a call from a nurse at Sanford Hospital asking if Deputy Christopherson had any idea what chemicals may have been used. Deputy Christopherson advised the nurse that he had not been able to get a hold of anyone who knew yet. (b) (6) stated to Deputy Christopherson that he thought (b) (7)(C), (b) (6) was the agronomist for (b) (7)(C), (b) (6), so Deputy Christopherson contacted (b) (7)(C), (b) (6). (b) (7)(C), (b) (6) stated to Deputy Christopherson that the company he worked for did not handle Mr. (b) (7)(C), (b) (6)'s fields. Deputy Christopherson contacted the Union County Sheriff's office by telephone. The Clay County Sheriff's Office provided Deputy Christopherson with several phone numbers for South East Farmers Coop. Deputy Christopherson contacted Chad Nelson by telephone. Mr. Nelson provided Deputy Christopherson with the chemicals that were applied to (b) (6)'s soybean field. Deputy Christopherson contacted the Sanford Emergency Room and provided them



with the information. The chemicals that were reported from Mr. Nelson were Roundup, Tap Out and Ultra Blazer [attachment #11].

On July 11, 2018, at 9:43 am, Inspector Petersen contacted Laura Sundet, [605-677-7149] Bookkeeper for the Clay County Weed Department, 45969 Timber Road, Vermillion, SD. Mrs. Sundet stated to Inspector Petersen that Dennis Ganschow, Weed Supervisor for Clay County, was on vacation, she did not have access to the spray records. Mrs. Sundet did indicate that the Clay County Weed Department uses Spreader 90 and Method 240 SL to spray the county ditches. Mrs. Sundet stated to Inspector Petersen that when Mr. Ganschow gets back from vacation that he will send Inspector Petersen the actual spray record by email. On July 12, 2018, at 10:20 am, Mrs. Sundet sent Inspector Petersen the Fairview Township Project Cost Record Journal indicating that Method 240 SL and Spreader 90 were used in Fairview Township [Attachment # 12]. On July 23, 2018, at 10:22 am; Inspector Petersen contacted Mrs. Sundet stating that Inspector Petersen did not receive the spray record from Mr. Ganschow yet. At 10:22 am, Inspector Petersen contacted Mr. Ganschow [605-661-5893] Mr. Ganschow agreed to send Inspector Petersen the spray record. At 11:39 am, Inspector Petersen received an email from Mrs. Sundet indicating that on (b) (6) property was not sprayed [Attachment #13].



This picture was taken facing south-east of the soybean field that was sprayed, along (b) (6).





This picture was taken facing north of (b) (6) and (b) (6) house and yard.



This picture was taken facing east of the north ditch along (b) (6) approximately the spot where (b) (6) was standing when she was exposed to the pesticide vapor.





This is an up close picture of the grass where sample number 04-SP-19 was taken.



This is a picture of where sample #04-SP-19 was taken, 46 FT from the soybean field across the road.





This picture was taken facing north-east of a tree that is on the north side of the road, in (b) (6), where sample number 05-SP-19 was taken.



This is a picture of where sample #05-SP-19 was taken, 60 FT from the soybean field across the road.





This picture was taken facing south-east of a shrub that is located in the north ditch, 20 FT, from the soybean field that was sprayed.



This is a picture of where sample #06-SP-19 was taken, in the north ditch, 20 FT from the soybean field that was sprayed.





This picture was taken facing north-west, of a row of lilac shrubs that are in (b) (6) yard, 100 FT from the road, on the north side.



This is a picture of where sample #07-SP-19 was taken, 100 FT from the road, on the north side.





This picture was taken facing north of a shrub that is on the south side of (b) (6), (b) (7) (C) house.



This is a picture of where sample #08-SP-19 was taken, on the south side of (b) (6) house.



Samples #4, 5, 6, 7, 8, 9, 10, 11 were sent in to be tested for the following pesticides: Glyphosate, Acifluorfen, Clethodim, Fluxopyroxad, Pyraclostrobin and Aminocyclopyrachlor. Samples were mailed on July 11, 2018 [Attachments #18-25].

For the location of where the samples were obtained; see land maps [Attachments #26-27].

Pesticide Label information and weather history, see N Drive under case number.  
[www.wunderground.com](http://www.wunderground.com)

For more information see the N Drive.

This concludes my initial investigation of the pesticide human exposure for (b) (6).

Sherrie Petersen  
South Dakota Agriculture Inspector  
South Dakota Department of Agriculture  
July 24, 2018

## ATTACHMENT LIST

(b) (6)

1. Pesticide Notice of Inspection – (b) (6)
2. Voluntary Statement – (b) (6)
3. Voluntary Statement – (b) (6)
4. Inspection Findings Sheet – Sherrie Petersen
5. Pesticide Notice of Inspection – Chad Nelson
6. Spray Record
7. Weather information [South East Farmers Coop Provided]
8. Pesticide Use Inspection – Sherrie Petersen
- 8A. Weather Information
9. Voluntary Statement – Brian Rupp
10. Voluntary Statement – Josh Adams
11. Clay County Sheriff's Report
12. Project Cost Report – Clay County Weed Department
13. Spray Record – Clay County Weed Department
14. Spray Record – South East Farmers Coop [provided to (b) (6)].
15. Tap Out Information [provided by (b) (6)]
16. Ultra Blazer Information [provided by (b) (6)]
17. Roundup Weathermax Information [provided by (b) (6)]
18. Sample Report
19. Sample Report
20. Sample Report
21. Sample Report
22. Sample Report
23. Sample Report
24. Sample Report
25. Sample Report
26. Land Map
27. Land Map
28. Sanford ER Nurse Note [provided by (b) (6)]